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SIGMA XI QUARTERLY

EDITORIAL COMMITTEE

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SIGMA XI IN WAR TIME

The war has placed before Sigma Xi, as it has before every other institution and organization of the country, problems hardly even dreamed of twelve months ago. Never before in history has science been of such life-and-death importance as at the present time. Every science, every scientist, and every scientific organization is called upon to render the maximum possible service in assisting the country in its hour of need. What are the duties of Sigma Xi in this connection?

Obviously no simple, categorical answer is possible. Sigma Xi represents several thousand active scientific workers, each one of whom, as an individual, may be counted on to contribute his just share to the success of our arms, in whatever capacity he may serve. The aggregate of such service will be monumental, but Sigma Xi cannot justly claim credit for such achievements, except in so far as each individual worker exemplifies the fundamental spirit for which Sigma Xi stands. It should be a fitting topic, at least for informal discussion, at the next convention to consider the means by which Sigma Xi, as a Society, representing the highest ideals of Science, can be of service to the government.

At the New York (1916) convention this matter was brought to the attention of the Society by means of an invitation from the National Research Council to coöperate in developing the scientific resources of the country. The Society, at that time, voted to refer the invitation to the Council. The Council considered the matter at its May meeting and recommended that the pages of the QUARTERLY be placed at the disposal of the Council for such use as could be made of the space.

A general discussion, however, by those who have given the matter thought in advance should bring to light many other ways in which Sigma Xi can aid in war time. Here should be a crucial test as to whether our Society can muster a spirit worthy of a nation-wide organization, or whether in the future we must be content to exert an influence of a purely local character in the several institutions of learning at which chapters are located.

Have our several chapters anything in common? If so, we should be able to join together in activities calculated to promote the common good. Have we *really* a national spirit? If so, that spirit, whatever it is, should be brought to the aid of the country. There have been, in the past, criticisms that our conventions do not interest the rank and file of the society because, in the main, they deal with administrative details and problems of organization rather than with the larger questions of scientific interest. In a sense this criticism has been just, but with the rapid growth of the Society there have been many details in imperative need of attention. These have occupied the full time of our two or three conventions. Further, of necessity conventions have been held in the midst of a very busy week. In fact, instead of a matter for criticism, it is rather a tribute to the spirit of loyalty that delegates, attending the Convocation week meetings on their own expense and with many other matters at hand, have made the Sigma Xi conventions so successful in the past.

But here is a question worthy of the best minds in the Society. The discussion of the duties and opportunities before the Society surely forms a common meeting ground for all members and for all chapters. Let the chapters select the best delegates available. Let these delegates individually think over the possibilities before the convention, and make it their duty to attend and contribute to the discussion of this vital subject.

INSIGNIA FOR ASSOCIATE MEMBERSHIP

Even in these times when everything is subordinated to the war, a certain continuity of activities must be maintained. Of necessity, some items of business must come before the Convention. One of these items is the question of insignia for associate members. When the New York Convention passed the amendments to the Constitution creating the new grade of associate membership,

it rejected the proposals to provide insignia for such members, possibly through a misunderstanding as to the real significance of the new grade. In the past year several chapters have, in their By-laws, provided for the election of associate members. There is beginning to be a realization that such members are not on probation in the society. They are elected to membership without any intimation that, should they fail to qualify later for full membership, they may be asked to relinquish their connection with the Society. Associate members are *permanent members* of the Society. In certification of such elections, they are given certificates of membership, differing only in form or wording from those given to regular members. There seems to be no logical reason why associate members should not wear a badge.

In fact, when it is considered that the primary object of associate membership is to encourage the younger students in scientific and technical courses during the critical period in their college work, it becomes necessary, in order to bring about this result, that the newly-elected associate members should wear some distinctive badge in order that they may the more quickly become known to *all* the regular members of his chapter. In our larger universities, it is impossible for *all* the members of one department to become acquainted with *all* the members of another department, even through the medium of Sigma Xi. It is probable therefore, that, without some distinctive badge this primary object of associate membership would be defeated largely through a restriction of the associate's circle of acquaintance in the chapter to members of his own department. He would fail to receive that inspiration which comes from personal contact with prominent investigators in other fields. The wearer of an associate membership badge should and would receive more than casual attention from the older members of the chapter. Should the associate member wear no badge, the chances of his making the acquaintance of regular members after initiation are much diminished.

Of course chapters should, and will, exercise much care in selecting for associate members those who show sufficient potential ability to insure that a large proportion of those so elected will eventually attain full membership. It must be remembered, however, that election to associate membership, at least in the case of undergraduates, will come at a period in the student's course when his life work is by no means decided upon. Many circumstances

may prevent his following a line of work which would lead to the possibilities of full membership. Election to associate membership should mean this and this only: that *at the time of his election*, the candidate *gave promise* of showing proficiency in those lines of work which it is the object of the Society to promote, "and that the Society wishes to encourage him by making possible a more intimate acquaintance with those whose life work is dedicated to science." To imply anything more, to suggest that we do not care to regard him as an *associate* in case he fails to attain full membership, would be to impose upon the new grade of members an obligation absolutely contrary to the spirit of perfect freedom that prevails in scientific circles. To *convince* the associate of our sincerity in this attitude, we should give him a badge, his for all time if he cares to wear it, as a visible sign of at least *latent* scientific ability. Should he attain full membership, he will probably no longer use the associate badge. Sigma Xi has become such a nation-wide organization that wherever the Society means anything at all, the use of the associate badge by those who did not reach full membership cannot possibly be misunderstood provided the new badge is sufficiently distinct from that for regular membership.

The committee, appointed by the Council to introduce this matter into the Pittsburgh Convention will present the designs prepared under the direction of President Howe for use at the New York Convention. This badge comprises a rectangular pin (either 7 x 13 or 8 x 21 millimeters) with the letters $\Sigma \Xi$ in white enamel on a blue background within a gold frame, with space on the back for engraving such items as owner's name, chapter, etc. It is to be hoped that the convention will be able to give this matter careful attention.

UNIFORMITY IN BADGES FOR REGULAR MEMBERS

If the Pittsburgh Convention adopts the associate membership badge, the question of uniformity of badges for regular members will be raised. So long as there was only one grade of membership, it obviously was not a matter of very great importance what particular design of key or pin members wore so long as there was a more or less close approximation to the original design. With, however, a new grade of membership to be represented, it may be desirable, in order that there shall be no possible misunderstanding

as to the grade to which any member belongs, to standardize badges for regular members.

Further, Sigma Xi, to realize its full opportunities must become a society of more than local-chapter influence. We must have a *national* Society in fact as well as in form. To bring this about, not only must we engage in such undertakings as the establishment of Sigma Xi fellowships as proposed by President Stieglitz, or in coöperation with other agencies in assisting in the scientific development of the country as a whole, but we must bring about a spirit of unity by giving attention to the smaller details. It was with this in mind that the council, at its May meeting, appointed a Committee to consider the general question of securing a central agency to supply keys to the several chapters, either directly or through the National Society. This committee will study the present variations in styles of keys, sources of supply, etc. and, will then make such recommendations to the Council as the investigation may seem to warrant, provided the several chapters are willing to coöperate. Incidentally, it should be possible to supply standard keys in quantity at a material reduction in cost.

Coincident with this question, might be considered the question of a uniform stationery both for local and for inter-chapter correspondence. The committee would be materially assisted in its work by an informal discussion of such questions at the convention.

In the discussion of this and allied subjects, due recognition must be given to the fact that there have been in the past, and must be in the future many differences among the several chapters, due largely to variation in local conditions under which chapters exist, and to chapter traditions which have become fixed by virtue of such conditions. Thus one chapter may wish to elect to full membership mainly undergraduates, because Sigma Xi in that chapter has developed in such a way as to be synonymous with the highest achievement in undergraduate circles, while another chapter, with a strong graduate school, may find that it can best uphold the ideals of the Society by electing graduates only. One chapter may make a strong point of its social activities. Another may find formal lectures best suited to its purpose. The women of New York State may vote, but those just across the line, in Pennsylvania, may not. Yet all the people of both states use the same postage stamps and swear allegiance to the same flag. There will always be opportunity for chapters to exercise "Chapter Rights," some of which however

may have to be modified if Sigma Xi is to build a really effective national organization upon the common ground of things of interest to us all.

THE QUARTERLY

Time did not permit a free discussion of the question raised at the last convention in regard to the continuation of the QUARTERLY. The matter was referred to the Council which has already reported its action. This important matter may come up at the Pittsburgh Convention, and if so, delegates should be prepared to discuss it not so much from the standpoint of past performance but in view of future possibilities. If Sigma Xi is to develop into a real national organization it is absolutely necessary that there be some medium of inter-chapter communication other than that provided by the brief annual conventions. The QUARTERLY further, furnishes the best possible medium through which to interest our very large proportion of Alumni Membership, and thereby, in assisting in carrying out the proposals of President Stieglitz to establish Sigma Xi fellowships, supported in part by contributions from Alumni members. Is it fair to limit active participation in Sigma Xi to those who *by chance* happen to live in universities where there are chapters, and practically, thereby to cut off all other members from Society activities? As has been pointed out in these pages, such a policy is a deliberate neglect of our available resources.

The development of industrial research, which surely comes within the scope of "Science, pure and applied" has raised a problem which the writer believes to be of fundamental importance, and which has never even been considered by the Society. Except in so far as each chapter makes an attempt to keep in touch with such of its Alumni Members as happen to engage in industrial research (the number of chapters which keep in communication with their non-resident members is *very* small) there is no way at present, save by means of the QUARTERLY, to develop any extra-chapter interest in any policy of expansion. And yet many of these non-resident alumni members are not only intensely interested in scientific work in general, but are in a position to render very great assistance in any undertaking in which the Society may engage.

The QUARTERLY must be what the individual members of the Society make it. If it is to succeed, if indeed there is to be an inter-chapter spirit which will make activities of national scope pos-

sible, the journal must be supported by more than a mere handful of members. A free discussion at the convention, giving the editorial board clearer ideas of the kind of journal which the members wish to support would materially assist in developing the *QUARTERLY* along those lines in which it can be of most use.

Of course, it is difficult, if not impossible to do very much in the way of development in these times of war, except in so far as service to the war is necessary. The most that can be done is to maintain our facilities intact, ready for instant expansion to meet obligations, as yet unknown, after the war is over.

From this standpoint, even if, after discussion, it should be deemed unwise for Sigma Xi to take a more active part in war work of a scientific nature, the coming convention should be one of the most important which the Society has ever held.

F. K. R.